

Notice of Allowability**Application No.**

10/542,433

Examiner

LONGBIT CHAI

Applicant(s)

BOUILLET, AARON REEL

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/16/2009.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 4/16/2009.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Longbit Chai/
Primary Examiner, Art Unit 2431

DETAILED ACTION

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in a telephone interview with Brian J. Cromarty (Reg. No. 64,018) on 16 April 2009.

This application has been amended as follows:

IN THE CLAIMS

Replace claim 1, 9 and 15 as follows.

Claim 1

A signal processing apparatus comprising:

a source of a fixed rate digital signal;

a signal processor responsive to a burst clock generated by a clock generator, said signal processor operating in a synchronous-sampling mode for producing a control signal representing a symbol rate; and

an interpolator operated using a fixed rate clock and responsive to the said control signal for processing the fixed rate digital signal to yield samples at the symbol rate by calculating a symbol value at a symbol location by interpolating a number of fixed rate samples adjacent to

said symbol location and outputting the samples to the signal processor, and said interpolator being further operative to enable [[a]] said burst clock in response to said samples at the symbol rate being ready to be processed by said signal processor.

Claim 9

A method of signal processing comprising the steps of:

- receiving a plurality of digital values at a fixed rate of time;
- receiving a control signal representing a symbol rate from a signal processor operating in a synchronous-sampling mode, said signal processor being responsive to a burst clock generated by a clock generator;
- calculating a signal level at a symbol location using an interpolator responsive to said control signal by interpolating the signal level from the plurality of digital values of a number of fixed rate samples adjacent to said symbol location to yield samples at the symbol rate, wherein said interpolator operated using a fixed rate clock; and
- enabling [[a]] said burst clock in response to said samples at the symbol rate and said calculated signal level being available to said signal processor.

Claim 15

A signal processing apparatus comprising:

- a source of an analog signal;
- an analog to digital converter for converting the analog signal to a fixed rate digital signal;
- a demodulator operating in a synchronous-sampling mode;

a processor responsive to a burst clock generated by a clock generator, said processor operative for producing a control signal representing a symbol rate; and

an interpolator operated using a fixed rate clock and responsive to the said control signal for processing the fixed rate digital signal to yield samples at the symbol rate by calculating a symbol value at a symbol location by interpolating a number of fixed rate samples adjacent to said symbol location and outputting the samples to the demodulator, and said interpolator being further operative to enable [[a]] said burst clock in response to said samples at the symbol rate being ready to be processed by said signal processor.

Allowable Subject Matter

Claims 1 – 20 are allowed.

The following is an examiner's statement of reasons for allowance:

The above mentioned claims are allowable over prior arts because the CPA (Cited Prior Art) of record fails to teach or render obvious the claimed limitations in combination with the specific added limitations recited in claims 1, 9 and 15 (& associated dependent claims).

The present invention is directed to a method of signal processing comprising the steps of receiving a plurality of digital values at a fixed rate of time. No singular art disclosing, nor motivation to combine has been found to anticipate or render obvious the claimed invention of receiving a control signal representing a symbol rate from a signal processor operating in a synchronous-sampling mode, said signal processor being responsive to a burst clock generated by a clock generator; calculating a signal level at a symbol location using an interpolator responsive to said control signal by interpolating the signal level from the plurality of digital values of a number of fixed rate samples adjacent to said symbol location to yield samples at the symbol rate, wherein said interpolator operated using a fixed rate clock; and enabling said

burst clock in response to said samples at the symbol rate and said calculated signal level being available to said signal processor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONGBIT CHAI whose telephone number is (571)272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Longbit Chai/

Primary Patent Examiner
Art Unit 2431
4/02/2009